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TRADING THIN AIR

EPA's Plan to Allow Open Market Trading of Air Pollution Credits

June 2000

About This Report

Public Employees for Environmental Responsibility (PEER) is an association of resource managers, scientists and biologists, law enforcement officials and other government professionals committed to upholding the public trust through responsible management of the nation's environment and natural resources.

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1. **Organize** a strong base of support among employees with local, state and federal resource management agencies;
2. **Monitor** land management and environmental protection agencies;
3. **Inform** policymakers and the public about substantive issues of concern to PEER members; and;
4. **Defend** and strengthen the legal rights of public employees who speak out about issues of environmental management.

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About This Report

This white paper was written by employees within the U.S. Environmental Protection Agency (EPA). The material comprising this report has been extracted from the public record and official documents through the Freedom of Information Act.

The plans of the Clinton-Gore Administration to allow inter-sector or open market trading of air emission credits have moved beyond the mere proposal stage and been put into practice in several states well in advance of finalization of the policies. In an attempt to legitimize these outlaw operations, the Administration is trying to rush out a retroactive policy for national implementation. ***Trading Thin Air*** describes the bureaucratic birth and evolution of this corporately sponsored approach to environmental compliance that relies on "market forces" rather than traditional regulation.

This report traces how this new federal environmental policy was forged, influenced and ultimately warped in an effort to produce the proverbial "win-win" pollution solution timed for maximum benefit — not for public health but for election year hype.

In their eagerness to pursue this market based solution, the Clinton-Gore Administration has overridden EPA's own Office of Inspector General in order to paper over a host of technical, practical and even conceptual problems plaguing the latest plans for open market trading of air pollution credits. ***Trading Thin Air*** details these problems and explains their consequences for public health and the environment.

In December of 1999, after embarrassing leaks of internal assessments regarding potential effects of the Administration's plans on poor and minority communities, EPA's Office of Civil Rights issued a "gag order" warning employees of possible criminal prosecution or disciplinary action for the disclosure of "non-public information." The authors of this white paper hope to stimulate a public discussion of the serious concerns about open market trading which can no longer be ventilated internally.

The purpose of this report is to provide the public with an insider view on how its environmental agencies actually operate. As with previous employee-authored PEER white papers, the authors remain anonymous in order to avoid further retaliation and to allow the information in this white paper to speak for itself. Copies of all documents referenced in ***Trading Thin Air*** are available from PEER. The authors invite independent reviewers to examine the assembled record and draw their own conclusions.

PEER is proud to assist conscientious public servants who have dedicated their careers to protection of natural resources and the faithful execution of environmental laws.

Jeff Ruch
PEER Executive Director

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I. Executive Summary

As part of its effort to "reinvent" government, the Clinton-Gore Administration has embraced "market based solutions" in the form of pollution trading programs. "Emissions trading" allows facilities to buy and sell the right to pollute. What is traded under these policies is a "credit," representing emission reductions, which is used as an alternative means to show environmental compliance.

A proposal the Administration advanced this fall goes well beyond traditional air emissions trading concepts in which trades are limited to one economic sector and only one type of pollutant. The new plan would allow inter-sector or open market trading (OMT). Under this new plan, facilities can increase or maintain their current levels of "smokestack" pollution by removing mobile pollution sources such as old cars, leaf blowers, lawn mowers, etc.

The Administration is now poised to begin approving state implementation of OMT despite an array of unresolved problems which, according to EPA employees, could cripple enforcement of the Clean Air Act against stationary sources of pollution.

Obsessed with the prospect of obtaining an election-year "win-win" solution that promises to decrease pollution while cutting back regulation, EPA managers have ignored glaring technical deficiencies, glossed over severe enforcement problems and muzzled internal dissent. As a consequence, the Clinton-Gore Administration has allowed its fixation on developing market based solutions to distract it from its primary responsibility of protecting public health.

As explained in ***Trading Thin Air***, there are three major defects with the OMT plan:

- First is the absence of "quantification protocols," i.e., the technical procedures for creating a common, verifiable currency for trading. Quantification protocols ensure that a trade is an "apples-to-apples" exchange. The EPA's own Inspector General (IG) has raised this failing in several reviews, yet EPA management has overridden the IG's findings of a "material weakness" to proceed with its proposal.
- Second, the plan is utterly dependent upon an enforcement role which EPA cannot fulfill. EPA's enforcement programs already have serious limitations and are in no condition to support new, more complex responsibilities.
- Third, EPA's concentration on OMT has indefinitely delayed submission of air pollution control plans for all federally designated urban "nonattainment areas" — areas disproportionately comprised of poor and minority populations who are bearing the primary health consequences of excessive air pollution.

Under OMT, cost reduction for industry would replace public health as the driving force behind compliance strategies since markets, not EPA, set the standard for quality. The consequences for air quality would be direct yet uncontrollable as state after state would be able to opt out of known and certain compliance and attainment strategies and opt into new market-based regimes where everything would be negotiable but little would be verifiable.

While EPA struggles to finalize these policies, it has turned a blind eye on several states which have already proceeded with open market trading. As the number of states and sources evading their Clean Air Act responsibilities by way of this "don't ask don't tell" policy has grown, EPA has found itself in a frantic rush to "grandfather" the past noncompliance.

The effects of this noncompliance may have serious public health consequences. Since the OMT plan allows "cross-pollutant" trading, a company may increase its emissions of a highly toxic chemical (such as benzene) if another company decreases its emissions of a relatively non-toxic chemical (such as nitrogen oxide or NOx). Thus, more deadly pollutants could remain unabated in return for reductions of

chemicals with little direct results for public health. When several industrial facilities purchase pollution credits in one geographic area, concentrations of pollutants could create toxic hot spots.

Heavy polluting industries that would most benefit from open market trading operate in low income urban areas, a factor which would exacerbate the environmental inequality inflicted upon the less affluent neighborhoods and the people who reside in them. Unfortunately, the Administration fails to credibly address the "environmental justice" effects of its own proposal.

Driven by the desire to unveil a "re-invention" regulatory success story during a presidential election year, EPA managers have deliberately turned a blind eye to problems:

- invoking powers to override negative IG findings and warning employees about the legal and professional consequences of disclosing internal documents;
- tolerating a web of incestuous interconnections between top agency policymakers and the corporate creators of OMT; and
- encouraging "demonstration" trades of essentially worthless emission credits (in lieu of meaningful pollution reductions or fines) in a tortured effort to show that a pollution marketplace can work.

In the end, EPA was simply trading thin air.

This reports concludes with the recommendations of concerned employees on how to back out of this ill-conceived drive for premature approval for open market pollution credit trading and tackle the underlying problems that need to be addressed before any market-based compliance schemes can be relied upon to protect public health and air quality.

II. The New Paradigm

"...the open market system in effect deputizes the buyer's commercial interest to assure the environment is protected."

— Richard Ayres in "Protection of the Public Interest: Enforceability"

Open market trading was christened as the new paradigm for environmental regulation in a 1994 paper written by Richard Ayres of the law firm of O'Melveny and Myers. "Developing a Market in Emission Credits Incrementally: an 'Open Market' Paradigm for Market-Based Pollution Control" was published in the Bureau of National Affairs Environment Report on December 2, 1994. This paper was deeply influential in the newly formed Clinton/Gore Administration.

The "new paradigm" promise of "easy" reductions powered by market incentives was extremely tempting to politicians who were advancing the argument that economic progress and environmental improvements were not only compatible but were also inextricably linked.

During the first weeks of January of 1995, the Administration made two signal environmental policy decisions affecting its air program. One decision inaugurated "open market trading" as the "new paradigm for market based pollution control." This was publicized in a letter from Assistant Administrator for Air and Radiation Mary Nichols to state air pollution control directors dated January 23, 1995 specifically citing the Ayres paper as the inspiration for the proposed approach. Building on this decision, in an announcement by President Clinton and Vice President Gore on March 16, 1995 of their plans for "Reinvention of Environmental Regulation," open market trading was listed as the top priority.

Delay in Attainment Plans

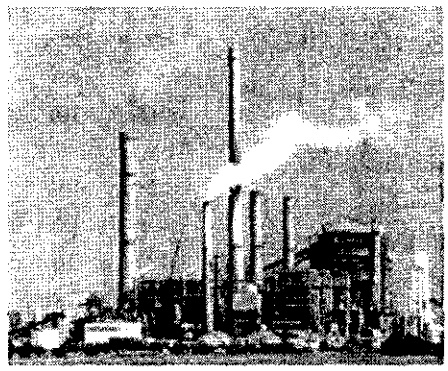
The second policy directive, announced internally to Agency staff in mid-January and memorialized in a letter to EPA Regional Administrators on March 2, 1995, announced the deferral for at least two years of the required submission of attainment plans for ozone. These plans had been due on November 15, 1994. Nichols' letter cited "unforseen difficulties in gathering the necessary data" and that "the large amount of reductions likely to be needed...has resulted in unavoidable delays."

As the two Nichols memoranda show, trading moved ahead of attainment planning as a priority. The net effect of these announcements was to signal to the regulated community that the priority would henceforth be on market based solutions and cost reductions. This is in marked contrast to the Clean Air Act, in which the top priority is attainment of the primary health based standards, with economic incentive programs simply one of many tools to be employed in meeting that priority. With these events, previous attempts at balancing traditional and market based approaches were at an end, and the era of supremacy of the marketplace became deeply entrenched.

The signal was not missed by the regulated community, or by state regulators, some of whom had their feet cut out from under them by this policy shift. Since that time, the emphasis in many states has become development of trading programs *instead of* plans for progress toward attainment of air quality goals.

One of the best examples of this is Illinois, which has devoted substantial resources to development of its Emission Reduction Market System (ERMS), while neglecting to submit any semblance of the attainment

plan which was due five years ago for the Chicago area. Chicago is officially designated as a "severe" non-attainment area for ozone; like most urban areas, it has a high rate of asthma, and a rate of respiratory-related hospital admissions which spikes immediately after ozone levels peak. Similarly, most of the three dozen or so other ozone non-attainment areas are now five years overdue with their 1994 ozone attainment plans, and national average ozone levels for the most recent year reported (1998) increased 5% over the previous year.



Is Trading Inherently Bad?

As an activist with whom Mary Nichols used to work when she was an environmentalist stated, "it's not that I'm against all trading programs, it's just that I've never seen a good one yet." In theory, economic incentive programs and emissions trading make sense. Their promise is to stimulate clean-up actions that would not have occurred otherwise, putting the creative power of the market place to work finding new ways to reduce pollution. So what is the problem? The flaw comes from the assumption that credited reductions will be from actions *that would not have occurred otherwise.*

All too often trading is what regulators are doing *instead of* getting the pollution reductions already required and promised to the public under existing federal law. Problems arise when emissions trading is used to delay, rather than accelerate, compliance with the Clean Air Act's requirements. To the extent the program resulted in reductions which were not going to happen anyway, by converting those reductions to credits and allowing them to be used *in place of* compliance with federal requirements, any possible environmental benefits from those reductions were eliminated and an opportunity was wasted.

So, how can one distinguish a good trading program from a bad one? A good program proceeds from a clearly defined starting point, or baseline, which first of all guarantees whatever clean-up is already required under federal law. That basic progress line must lead to a well defined end point clearly linked to the environmental goal — in this case, a health based air quality standard. Only then can trading be integrated with the core program. This integration demands safeguards, enforceable by both the federal government and the public, and guarantees that these alternative approaches produce even greater reductions and faster attainment of the ultimate goal of protecting public health.

These are the standards by which the Administration's OMT plan should be judged.

III. Romance of the Market

"Mary Nichols and I remain committed to developing a model rule which minimizes the Federal government's involvement..."

— John Seitz, Director, U.S. EPA Office of Air Quality Planning and Standards, responding to the Inspector General.

Since the mid-90's, open market proponents have been unable to settle once and for all the issue of whether emission credits should be certified, as in previous trading policies, before use or, in the "new paradigm" of open market trading, after use. That is, whether quality control should be built-in up front or on the back end of the process.

EPA has never found a "middle ground" and has instead settled on a back end, or liability-based approach. Sometimes called "buyer beware," this essentially relies on "the market" and the presumed fear, by credit users, of being unable to demonstrate compliance and therefore subject to enforcement actions. This approach is described rather elegantly in the 1995 "open market trading" (OMT) proposal in language generally attributed to Rob Brenner, then head of the Office of Planning Analysis and Review (OPAR) who had just returned from a six month detail to the White House where he worked on the President's Reinvention task force:

> "Open market trading programs can begin operating without waiting for agreement on...pre-established emissions measurement methodologies...The open market system would shift review and approval...from the front end...to the time of use as **a compliance determination and enforcement matter...harnessing private sector resources to assist government in assuring quality control.** Responsibility for compliance would motivate arms-length users to inspect carefully and choose wisely among the (credits) offered on the market, and to protect themselves...In order to minimize risk, buyers would look for quality and favor (credits) that present low risks of placing users in non-compliance...The EPA believes that the principle of **buyer liability** will work the best to assure (credit) quality."

At a public hearing on an open market trading (OMT) proposal, Ben Henneke, president of Clean Air Action Corporation, provided the rationale behind his belief that "the market" would naturally tend towards high standards of quantification:

> "EPA should not attempt to develop protocols or comprehensive protocol 'guidance' at this early point...Measurement issues can be resolved by market decisions and by discounting at enforcement."

The banner of market driven credit quality was indeed picked up by states hoping to leap ahead with open market trading. As expressed by Michigan's Air Quality Division Chief Dennis Drake in a October 18, 1995 letter to EPA:

> "The AQD believes that the market will address uncertainty and provide the driving force for improving the accuracy and replicability of quantification protocols...Less reliable credits will have a lower market value and may never be purchased for use."

These nearly poetic paeans to the miracle of the market are dependent on two assumptions:

1. the existence of standards by which to judge the quality of credits, standards of sufficient determinacy to support development of good protocols. Lacking such standards, users of suspect

credits could claim lack of "fair notice", and defend their use of shoddy credits by invoking such vague shibboleths as "due diligence," "good faith" and "good engineering practices."

2. a credible threat of inspection, audit and enforcement actions based on failure to comply with the standards and consequent penalties adequate to deter gaming the system.

The 1995 Open Market Trading Rule (OMTR) Proposal

The 1995 OMTR proposal proclaimed itself as a radical departure from previous trading policies, such as the 1986 Emissions Trading Statement and the 1994 Economic Incentives Program policy. These earlier regimes are now seen as overly slow, needlessly burdensome, cautious and, above all, hindering the ability of the business community to respond to the rapid pace of change in an increasingly competitive international marketplace. The policy hailed itself in its very first introductory sentence as "the number one initiative" in President Clinton's and Vice President Gore's March 16, 1995 announcement on "Reinventing Environmental Regulation." Among the more salient features of the program relevant to the issue of credit creation —

- **No waiting.** "(P)rograms can begin operating without waiting for agreement on...pre-established emissions measurement methodologies...These features would reduce front-end costs." "The open market system would shift review and approval...from the front end as a SIP [State Implementation Plan] revision or permit change, to the time of use as a compliance determination."
- **Markets, not EPA, set the standard for quality.** The policies are described as "harnessing private sector resources to assist government in assuring quality control. Responsibility for compliance would motivate arms-length users to inspect carefully and choose wisely among the (reductions) offered on the market."
- **Buyer beware.** "The EPA believes that the principle of **buyer liability** will work best to assure (credit) quality". This is the primary mechanism by which EPA hoped the marketplace participants would be motivated to be self-policing for high quality credits. This feature was touted in the proposal as coming from the "original program developers" and reflects their core assumption about the wisdom of "easy credits."

The contrast of the 1995 OMTR proposal with the quantification approach as it had evolved in the 1994 Economic Incentive Program (EIP) is sharp and intentional. The OMTR acknowledges that the 1994 EIP approach is more likely to produce "a common yardstick with which to gauge the validity of (credits) and the greatest certainty of outcomes." Nevertheless, EPA, citing resource demands, concluded the previous approach was no longer workable and that it "would significantly dampen development of the open market system."

Almost as if to underline her distaste for a "common yardstick," on July 10, 1995 Nichols delegated to the Regional Offices the ability to take independent actions on trading and other programs in their own Regions. This action was in sharp contrast to previous procedures which required Headquarters involvement and buy-off on such rule-makings.

Until this fundamental shift in EPA's approach to enforcement of emission reduction requirements, compliance techniques had to be included in the federally approved plans, in federal code, and as such were federally enforceable and subject to citizen suits. The OMT shift allows compliance techniques to stay "off the books," at least the federal books, and to be revised at will to meet the needs of specific states, localities and industries.

The Missing "Middle Ground"

The 1995 OMT proposal admitted there was an unresolved tension between the advantages and

weaknesses of pre-approval and post-use review of credits, and stated that "in response to these cross-cutting considerations, EPA has tried to develop a middle ground." For instance:

- Protocols for quantification must be used, but need not be included in the program submitted (as a SIP revision) for federal approval.
- While EPA approval is not required, "EPA intends to create a mechanism" in which some protocols would receive recognition as EPA approved. As to whether these protocols must be used, the proposal was indefinite.
- Regarding standards for protocol adequacy, guidance will be provided later, "EPA intends to issue guidance continuing criteria for acceptable emissions quantification protocols."

Five years later, the middle ground has never been developed. There are no standards, there is no process, the federal role is still undefined. Overall the policies proposed in 1995 left the issue of quantification in the hands of industry and "the market," which would require quality credits for its own self-interests in protecting against adverse compliance determinations and enforcement actions.

IV. Who Needs a Protocol?

"Development of Protocols and a strong system of control in our opinion is necessary to ensure the success and integrity of the program."

— Office of the Inspector General, "EPA's Development of its Proposed Open Market Trading Rule."

The Paradigm Shift

Prior to 1995, emissions trading policy had evolved steadily for more than fifteen years with a high degree of continuity and coherence. Since that time there has been an unresolved schism in EPA's trading policies.

The previous paradigm, as embodied in 1994 EIP, had two salient features:

- Quantification methods are a necessary element of the program, and must be included in the program submitted for federal approval.
- These methods must be "credible, workable and replicable," take certainty into account, and have to be specified for "each source category affected by the program."

Taken together, these features defined not only a federal standard for the content of the quantification methods, but procedurally how they would be federally reviewed and approved. This federal role provides (1) federal enforceability of the quantification requirements, (2) citizen enforceability by way of the Clean Air Act's citizen suit provisions, (3) national consistency coherence and equity, (4) protection against arbitrary state and local relaxation of the basic compliance requirements, including inspections, monitoring, record-keeping, and (5) protection against the "lack of fair notice" defense by sources found to be in noncompliance with their basic SIP requirements.

In sharp contrast, EPA's most recent attempt at a comprehensive trading policy, the 1999 Economic Incentive Plan (EIP) fails to resolve the key policy issues, fails to set clear standards for credit quantification, and fails to require federal approval and enforceability of quantification protocols. Thus, the 1999 EIP has defaulted to the OMT's "easy creation" quantification approach, which has become the general quantification approach for all forms of trading covered in the 1999 proposal.

Earlier trading regimes mandated that credits of differing origins be washed through a common program so there could be no doubt about the integrity and comparability of the credits. The 1999 EIP never developed this "middle ground" to resolve different types and sources of emissions. Consequently, the resolution proposed in the 1999 EIP is no resolution at all.

Lack of Standards is Hard to Ignore (Unless You Try)

This lack of standards is highlighted by contrasting the 1999 EIP as it has evolved from the 1995 OMTR proposal, versus the previously finalized 1994 EIP as it evolved from the 1986 Emissions Trading Policy Statement.

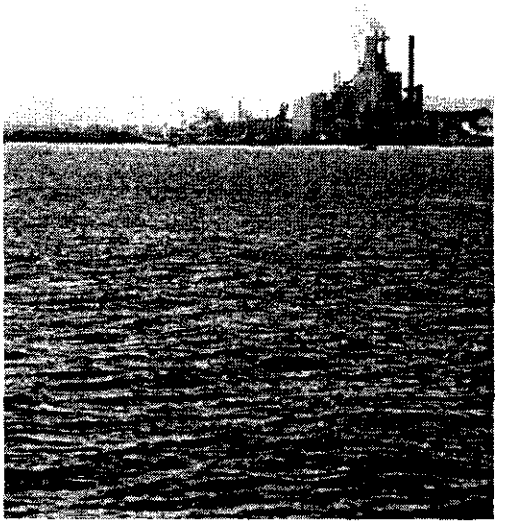
The pivotal issue for the past six years has been whether EPA will set national standards for the creation, or quantification, of emission reduction credits, or whether, instead, the policy will defer to "the market" to monitor and ensure the quality of the "currency" relied upon in economic incentive programs.

From the beginning, the "original developers of the open market concept" have advocated "easy creation" and careful avoidance of any approach trying to "fix mistakes in advance" regarding the quality control problems predicted by many other stakeholders.

How does the 1999 EIP proposal fare with regard to quantification of credits?

- The discussion of quantification requirements, or criteria, is extremely garbled and incomplete. While invoking general homilies to "quantifiable, workable" etc., the guidance provides little practical advice on what these terms might mean.
- Most astoundingly, the suggested quantification criteria (proposal at section 6.2(c)) conflict not only with the EPA's emission factors guidance itself, but with the Inspector General's findings on the use of emission factors in trading programs. Ultimately the discussion trails off into a reference to a later section for "additional information on quantification protocols." However, the text of that later section begins by disavowing itself ("does not reflect EPA policy") and stating rather clearly that this amounts to nothing more than a "starting point for policy development."
- The issue of whether protocols are to be made part of the federally approved and enforceable SIP is similarly indefinite. While EPA states that at some point it expects to act on the protocols, it does not make clear (1) when it expects them to be submitted, (2) whether they can be used before they are submitted, (3) when it will act on them, if they are submitted, or (4) what happens if EPA fails to act.
- An "adequacy review" process is named, but not described in terms of what the standards for the review would be.
- Even if protocols are eventually disapproved, credits created during this indefinite hiatus (prior to EPA proposed SIP action) are grandfathered indefinitely into the future. The only exception is for protocols which have previously been found "inadequate" in the adequacy review process.

In the 1999 proposal, EPA has tried to duck the hard choices. The issues of national standards and federal enforceability have been left unresolved. Overall there is a policy void at the core of the EIP guidance, which in practice is consistent with the position of those



who prefer a minimal up-front process for quantification of credits. To the extent there is any substance to the guidance on quantification, it is neutralized by its inconsistencies and lack of detail, which pervade the document so that it becomes hard to imagine any program, no matter how inadequate, being disapproved.

The Ignored Inspector General

By the conclusion of public commenting on EPA's 1995 open market proposal, the issue of quantification protocols had become quite contentious, both within and outside the Agency. EPA's Office of the Inspector General (OIG) was also concerned. Consequently the OIG conducted a number of investigations, issuing three reports between 1996 and 1998 directly related to open market trading. Several observations by OIG bear repeating.

MARCH, 1996 REPORT : "EPA's Development of its Proposed Open Market Trading Rule", Eastern Audit Division, Boston, Massachusetts

This was a "special review" conducted within the context of the OIG's comprehensive assessment's of EPA's air program. It is based on surveys conducted

between June and October, 1995, and is framed as an "advisory report" with a stated goal to "produce timely constructive change". The timeliness of the investigation was EPA's stated intention to finalize the OMTR proposal later in 1996.

- State officials and EPA's own Office of Enforcement and Compliance Assistance (OECA) "were concerned that enforcement could be weakened due to a lack of protocols" (p1). OECA staff felt that "enforcement is aided by clear protocols" and is "concerned whether protocol development guidance was adequate" (p7).
- "We believe EPA should consider taking a more definitive stand on the concerns raised to us by the states and OECA over the verification process and lack of protocols" (p1).
- The OIG also noted that the OMTR eliminated up front "certification" of credits, and that "while this...should accelerate trading transactions", it may "inadvertently allow use of invalid credits or weaken enforcement", destroy public confidence and discourage companies to engage in trading (p5).
- The OIG's "own limited testing of Emission Credit applications showed that 83.4% of the sampled applications were not sufficiently documented for approval by the state" (p5).
- In the OIG's concluding recommendation, it stated "...we encourage EPA to take a more definitive stand on some of the concerns brought to their attention by the states" (p9).

  EPA'S REPLY: EPA's Director of the Office of Air Quality Planning and Standards (OAQPS), John Seitz, stated "You raise several points in the body of your report and in the recommendations section concerning the appropriate policy direction....We appreciate you providing your point of view and will consider it...However, **Mary Nichols and I remain committed to developing a model rule which minimizes the Federal government's involvement** in the development and day-to-day operation of the market for these trades." (emphasis added)
- The OIG clearly felt this was an unfortunate position, and pointed out it had never advocated involvement in "day-to-day" operations, noting: "While we can understand the agency's desire to let the states or market dictate the ground rules, we urge EPA to reconsider this position. Development of Protocols and a strong system of control in our opinion is necessary to ensure the success and integrity of the program" (p11).

SEPTEMBER, 1996 REPORT: "Emission Factor Development"

Six months later, another OIG office published the results of its investigation of the Agency's development and use of "emission factors." This investigation was motivated by the increasing "need for reliable emission factors" for several of the programs initiated under the 1990 Clean Air Act Amendments, including the federal operating permits program (Title V) and "economic incentive programs, such as open market trading". Noting that the expansion of trading via OMT to new categories of sources would increase the reliance on emission factors, the OIG made a number of observations:

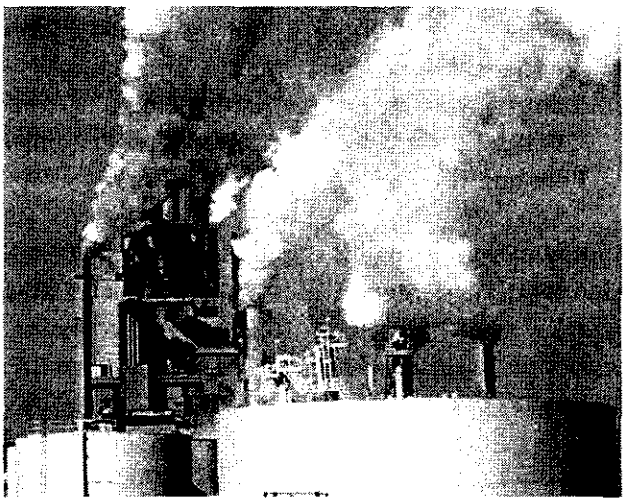
- "Most state and local officials we spoke with believed that the need for reliable emission factors will be critical to the success of open market trading programs," mainly because "for these trading programs to be successful a wide range of sources should be allowed to participate. This would include small stationary sources that will not be able to afford monitoring techniques to estimate emissions and emission reductions...In addition, for some pollutants, for example VOCs [volatile organic compounds], the processes involved do not lend themselves to monitoring" (p14).
- "We believe the status of emission factor development is a significant weakness that impedes achievement of major air program goals and is, therefore, a material weakness" (p3, Executive Summary). "Emission factor development has not met air pollution control programs demands for new and revised emission

factors (p5). "Emission factor development has not met statutory requirements and the inadequate extent of its progress is significantly impairing fulfillment of an important component of the Agency's mission"(p16).

- "Without reliable emission factors, EPA and the states who rely upon them cannot be fully assured that the...emission trading programs are effective in reducing air pollution. If these programs are not effective, the nation's air quality could be adversely affected and persons could be subjected to the health hazards associated with excessive exposure to various airborne pollutants" (p12).
- "OAQPS (trading) Group Leader told us that their group's position was that (AP-42) emission factors could be used for emissions trading since they were being used in other regulatory capacities." According to the IG, the OAQPS office working on protocol development said "it will recommend that emission factors rated 'E' (poor) or unrated should not be used for trading."
- The IG also noted EPA's intent to rely increasingly on industry partnerships in developing emission factors, and observed that due to potential "financial benefit to industries" to produce inaccurate factors, "the use of this method increases the risk of developing biased or unrepresentative factors. Accordingly it is important that (EPA) maintain sufficient control over this development method to ensure that representative factors result." The IG went on to observe, however, "our audit found indications that (EPA's) ability to oversee these partnerships may be diminishing" (p19).

FEBRUARY, 1998 REPORT: "The Effectiveness and Efficiency of EPA's Air Program," Northern Audit Division, Chicago, Illinois

In February of 1998 the OIG issued a comprehensive report on EPA's overall air program and its effectiveness. In that report it followed up on the 1996 report on



emission factors, concluding that "we still believe the program should be declared a material weakness, until OAR [Office of Air & Radiation] implements the corrective actions" (p39).

The IG noted that OAR had submitted an "emission factor strategy" to the EPA Senior Leadership Council and the OIG on November 25, 1997. In that strategy EPA described a substantial increase in resources (add two full time staff, quadruple funding to $4.2 million dollars) that would be required to improve the emission factor situation. As of two years later there has been *no increase* in resources. Even if the improvement plan were to be implemented, by the plan's own admission it would still not remedy the problems related to trading:

- The focus of increased resources would be on particulate and toxics, mainly for SIP planning purposes. As noted earlier, SIP inventory accuracy is substantially less than is needed, according to EPA's own guidance, for permitting and compliance determinations; further, most trading programs are aimed at ozone precursors.
- The plan defers development of emission factors for trading and permitting to the states and industries. This despite the OIG's cautionary note that such an approach would require both increased oversight and increased resources which are not provided for in the plan.

- Even with the program, the results would be "inadequate for most sources and, generally inappropriate to use for permit limits." (From OAQPS "5 Year Plan for Refocused Program Priorities")

Summing up the three OIG investigations, they have identified fundamental gaps in the policies and science underlying quantification of emission reduction credits, and provided suggestions on remedying those gaps.

A fourth report, on EPA and state enforcement programs, showed that the current state of enforcement cannot support market-based trading approaches. The reality is, however, that neither the science nor the policies have evolved since the 1995 OMTR proposal, nor since the OIG reports. EPA has resolved neither its internal conflicts over quantification nor its public policy.

The bottom line is that this program is not ready for prime time.

The Thin Reed of the Demonstration Project

Mary Nichols relied heavily on the recommendations of the Demonstration Project in her January, 1995 announcement and the August, 1995 OMTR proposal. This project was a joint effort of approximately 20 companies, regulators and environmental groups to consider technical and policy issues pertaining to air emissions trading. The "Emission Reduction Credit Demonstration Project" (DP), according to Nichols' January, 1995 letter "has developed and evaluated a number of protocols for (credit) creation that address how to quantify" reductions.

At the time, only Phase I had been completed, and reported on in a 1993 "Final Report". The Report's authors agreed that quantification was central, stating that "a principal purpose of this report is to show that it is possible to develop rigorous protocols to quantify emission reductions that may be used to create ERCs" [*i.e.*, Emission Reduction Credits] (p5). They also felt the Project's efforts were successful:

"The participants agree that the protocols that the companies developed and refined, following careful review by the other companies, regulators and environmental groups, are accurate and based on sound methodology. The protocols...are in many ways the highlights of the report" (p5). "(I)t is the recommendation of the... participants that the emission reductions created during this project be considered creditable by states and the US EPA" (p iv).

And what was in the protocols for the ten cases examined?

- Two of them relied on emission factors regarding which the protocols characterized "as sufficient for **compliance** purposes" but not for trading purposes (p21 & 29). One of these was Chevron's refinery leak detection program.
- For one of the Clean Air Action Corporation projects (RVP reduction) "the variability of the data was so great that it failed the test of 'quantifiable'" (p24).
- The Report does not define either the criteria or the federal role for quantification.

In the end, Project participants had demonstrated just what they said, and nothing more, i.e., the emission reductions are "quantifiable." This fails to address issues of accuracy, uncertainty and replicability. And on the key issue of whether credits should be certified before or after use, the participants remained divided.

In October of 1999 EPA Region 2 wrote to the State of New Jersey regarding its trading program and its request that EPA allow the use of 10 previously created batches of credits. Of these, 4 were leftover from the Demonstration Project. The Region rejected all of the credits due to a lack of documentation and other technical shortcomings.

V. And Now a Word From Our Sponsors

"I will not participate in any EPA matter in which the law firm of O'Melveny & Myers is providing representational services. This recusal is permanent."

— Mary Nichols, Assistant Administrator, Office of Air and Radiation, July 6, 1994

"We suggest that the EPA...can simplify its task by using Clean Air Action's Model rules...as a template for your deliberations."

— Richard Ayres, partner, O'Melveny & Myers, representing Clean Air Action Corporation, March 23, 1995

"This letter is to convey EPA's strong support for an important opportunity, in line with Administrator Browner's 'Common Sense' principle... two approaches with special promise have emerged... the first approach is the 'open market' trading system..."

— Mary Nichols, writing to the New Hampshire Air Resource Division Director, January 23, 1995.

"If the Agency...still believes it must fix mistakes in advance... I, personally, will be in the awkward position of having to disavow the product you and I have worked so hard to create."

— Ben Henneke, President, Clean Air Action Corporation, to David Doniger, Counsel to Mary Nichols, October 10, 1996.

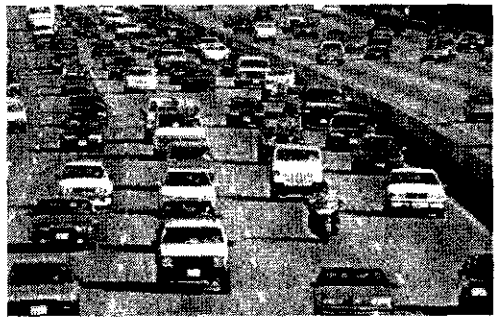
Who are These Guys ?

Throughout development of the "open market" scheme, the two main private sector actors were attorney Richard Ayres, partner in the law firm O'Melveny and Myers, and Ben Henneke, President of Clean Air Action Corporation and perhaps the most well known broker of tradeable credits. Henneke was represented by Ayres on behalf of O'Melveny and Myers throughout the Agency's pivotal decisions to endorse and promote open market trading.

Publically available documents show that these two men played an inordinately influential role in driving EPA's policies, and that the resulting policies did in fact incorporate the substance of their positions. They are the two prime movers of open market trading, or as they were referred to in the August, 1995 OMT proposal, "the original developers". The 1995 proposal cites two points of origin for open market trading, (1) the Demonstration Project and (2) Richard Ayres' lengthy article on open market trading published by the Bureau of National Affairs Environmental Report, December 2, 1994.

A look at the roster of the Demonstration Project during the years in which EPA relied upon its findings shows:

- several utilities and operators of large utility sized boilers
- 7 states who were supposed to be regulating those boilers
- a sprinkling of other companies, organizations and stakeholders
- one broker of credits - Ben Henneke, President of Clean Air Action Corporation.



What all these parties had in common was a concern with the looming Clean Air Act requirement for installation of "Reasonably Available Control Technology" (RACT) on dozens of categories of major stationary sources in nonattainment areas. The Act required installation "as expeditiously as practicable but no later than May 31, 1995." RACT was not a new requirement, and in fact was a carryover from the 1977 Amendments. It was, however, the first big technology requirement imposed on stationary sources under the 1990 Clean Air Act Amendments.

Deals Only A Mother Could Love

By this time it was well understood from past experience in the industrial and regulatory communities that such deadlines would best be met by phasing in controls during the year or two prior to the deadline, so that they could be operating reliably by the compliance deadline. What was different in the 1993-1994 time frame of the Demonstration Project's work, however, were signals from the Clinton-Gore Administration of far greater flexibility concerning a number of Clean Air Act requirements, and that it wanted to encourage credit trading programs.

Thus, a scheme was born whereby a very small number of utilities would follow the normal installation schedule, phasing the controls in over the 1993 -1995 time frame. They would then use these "early" reductions to generate credits, which would be sold to and used by other sources to show compliance with the May, 1995 deadline.

This "compliance," however, would exist only on paper. In reality, the sources would fail to meet the May, 1995 RACT deadline and the communities around them would have to forego the reductions which they were entitled to expect. All that was needed to legitimize this arrangement was a trading policy which would grant recognition to such temporary, or "early", reductions, and allow their use at a subsequent time (May, 1995 and beyond). This was the practical impetus for the genesis of open market trading during the 1993 - 1995 time frame.

Which brings us back to Henneke and Ayres. Almost all of the credits generated under the 12 Demonstration Project (DP) schemes were generated by Public Service Electric and Gas (PSE&G), which was a New Jersey utility and client of Ben Henneke and Clean Air Action Corporation. Of the twelve projects covered by the DP, eleven were brokered by Henneke and CAAC.

According to the Project report, almost all DP credits made paper demonstrations of compliance with the RACT requirements. The paper reductions could not truly be called early, either — the so-called "early" phasing of controls is normal, further, the reductions were already required by the Clean Air Act to occur "as expeditiously as practicable," as well as "no later than May, 1995." Obviously the PSE&G reductions were "practicable." Therefore the credited reductions were already required by the Act, and therefore were not really surplus to, or in excess of, reductions already required by law. State regulators had no business allowing tradeable credit for these reductions, but by this time the EPA had already cut the ground out from under the state and local agencies.

Ironically, it was the Act's looming requirement for emissions reductions which was leveraged to create paper credits, which in turn were brokered and used to avoid compliance with that very same requirement. This was indeed a "reinvention" of environmental regulation, in a way which was quite lucrative for the Clean Air Action Corporation.

At the time, according to the Demonstration Project reports, Henneke had already brokered over 1000 tons of credits. The Project report valued these credits at between $1000 and $2000 per ton. The latest accounting in CAAC's own Registry shows CAAC as having brokered over 8,000 tons worth of credits since 1993.

Henneke also brokered perhaps the worst open market trade ever in 1998, a trade in which the U.S. government was the recipient of 2500 tons of essentially worthless credits. In a dramatic press release on June 8, 1998 Attorney General Janet Reno announced what she characterized as a $7.8 million dollar settlement with Ford Motor for installing emission control defeat devices on 60,000 Econoline vans and other reporting failures for 1.7 million Escorts.

Under the Clean Air Act, the penalties could have come to over a billion dollars. But instead Reno and EPA Administrator Carol Browner arrived at an alternative settlement which "means cleaner air for the American people" (Reno). Browner, noting that smog "can aggravate asthma attacks in children," crowed that "we are working to reduce harmful levels of smog (ozone) through...actions like the one we are taking today." Nearly half of the total settlement ($2.5 million out of the $7.8 million) was attributed to the $1000 per ton value EPA projected for emission credits representing 2500 tons of NOx. According to the Clean Air Action Corporation's "Clean Air Registry," all 2500 tons were provided to Ford by CAAC.

The Registry also shows:

- There were no new reductions, and in fact nearly all the reductions had already occurred 2 to 5 years earlier.
- Over 1000 of the 2500 tons occurred outside of the ozone formation season.
- Another 945 tons were generated by a power plant (Detroit Edison) located in an area (Monroe County, Michigan) which had been designated some years earlier by EPA as an area in which NOx emissions played no role in ozone formation (section 182(f) NOx exemption, granted in 1995).
- While the Edison credits were for "early compliance", the requirements they were "early" for were Title IV acid rain requirements, and not based on the health effects which Browner and Reno claimed as the benefit of the settlement.
- Ford paid "$0"for the credits.

Each transaction record in the Registry for the 2500 tons carries the notation: "retirement to benefit the environment in compliance with Consent Decree, DOJ Case No. 90-5-2-1-2195."

It is not surprising then that the Clean Air Action Corporation objects to any further guidance on the subject of quantification.

And Everywhere That Mary Went...

As EPA developed and promoted trading, the Agency's top air official, Assistant Administrator for Air and Radiation Mary Nichols, had a direct connection with the policy's main proponents in the private sector. Nichols had been appointed in early 1993, and while confirmation took some time, even during the interim she was actively involved in policy deliberations. On July 6, 1994 Nichols signed a formal recusal in which she committed that she would "not participate in any EPA matter in which the law firm of O'Melveny & Myers is providing representational services." She further noted that "this recusal is permanent."

This recusal was required in order to comply with the Government Ethics Act, violation of which could result in prosecution under U.S. Criminal Code (18 USC 208). This section prohibits federal employees from "participat(ing) personally and substantially...through decision, approval, disapproval, recommendation, the rendering of advice, investigation, or otherwise, in (a proceeding) in which, to his knowledge, he, his spouse, minor child, partner...has a financial interest."

The government's recusal report noted that Nichols' recusal was related to her spouse's employment as an attorney. The Martindale-Hubbell Law Directory for 1995 lists both Richard E. Ayres and John F. Daum (Nichols' spouse) as members of O'Melveny and Myers Washington, D.C. office. Throughout the open market trading proceedings Ayres described himself as either a member or partner in the firm.

The ethical binds surrounding the trading policy is revealed in another of Nichols' recusals, this one from any matter in which she had participated as an employee of the Natural Resources Defense Council (NRDC). Richard Ayres was also an alumni of NRDC, and his tenure at the organization in the 1970's was concurrent with that of David Doniger, who during the Agency's OMT deliberations served in a specially created position "General Counsel" to Nichols.

Notwithstanding her recusals, Mary Nichols' involvement in development and promotion of trading was continual, detailed and decisive. She was the signatory on many key policy statements, an enthusiastic testifier in Congress and traveling saleswoman for open market trading. Nichols also overrode objections from EPA's own Inspector General as well as those of a number of EPA offices outside of Office of Air & Radiation. Her efforts in support of the program continued up to the month before she departed federal service in the summer of 1997 and were noted by her successor in a letter to the Chairman of the House Commerce Committee.

After leaving the Agency, Nichols returned to California, where she has since been appointed by Governor Gray Davis as Secretary of the California Resources Agency.

Other players

In all fairness, Mary Nichols was not the lone trading advocate within the Agency. Doing much of the yeoman's work, both then and now, has been David Doniger and Rob Brenner, whose official position migrated from head of the Office of Policy Analysis and Research (OPAR) to his current position as deputy to the current Assistant Administrator for Air & Radiation, Robert Perciasepe. Most observers of the internal discussions give Doniger and Brenner full credit for marketing the programs to Nichols while she was there, and carrying on the policies since she has left.

In recent months, Rob Brenner has become the leading apostle for trading. He is currently hawking trading schemes for use in other media (water, solid waste) by EPA, and is even trying to broker a deal with environmental justice communities in which they would trade their rights under federal permitting regulations in return for promises of area-wide reductions in toxic substances and other risk factors. So far the communities are saying no thanks.

The Oversight Battle

At a 1995 congressional hearing, Henneke expounded on the kind of OMT oversight he thought EPA should exercise:

> "Once that real use, in this particular case NOx RACT, had been identified and had been blessed by being talked about and everybody cheering...there have been five more NOx RACT customers pop up in New Jersey, and all but one of them already have the tons transferred. As far as they are concerned, the entire transaction is already over...They are already done, and the entire transaction again from the time they figured out they needed the ton to the time they...bought them was less than a month....look at the transactions that are going on rapidly. You are not getting them yet legally. They have not come through the single-source SIP process to be officially reviewed, but you need to review them unofficially and basically say nice things about them."

Richard Ayres of O'Melveny and Myers also offered EPA his thoughts on the needs of his client:

> "We are concerned that the staff draft (EPA's draft) seems to be raising afresh many issues that have been thoroughly considered...we suggest that the EPA...can simplify its task by using Clean Air Action's (Corporation) Model Rules...as a template for your deliberations."

With the RACT deadline just three months away, in February of 1995 Ayres echoed Henneke's point that this alternative RACT compliance scheme could not stand up to normal standards of enforcement:

> "Enforcement discretion is needed because it is impossible for EPA to put generic regulations in place in time to allow sources to use SDR's (OMT credits) for compliance with RACT requirements by the May 31, 1995 deadline provided for in the Clean Air Act."

Since then, open market trading advocates have never let up. In 1996 Henneke warned the Agency:

> "If the Agency...still believes it must fix mistakes in advance....I, personally, will be in the awkward position of having to disavow the product that you and I have worked so hard to create."

Overall, these gentlemen and their firms not only originated open market trading and made money off it, they defined the key issues and options, set the agenda for consideration of the issues, had unequaled access to top Agency policymakers and threatened the policymakers when they even considered alternative policies. While Henneke and Ayres did not get their way on every issue, their positions prevail to this day on two fundamental policy choices:

1. open market trading continues to enjoy the Agency's unfettered support, even though the guidance has never been resolved. Nonetheless, sources continue to use OMT as a means for compliance with federal regulations; and
2. "buyer beware" continues to be the Agency policy. This environmental *caveat emptor* replaces previous trading policies in which the Agency sets national standards and protocols governing quantification.

VI. When the Referee has No Whistle

"[N]either EPA nor the states have the resources to actively enforce trading programs."

— Clean Air Act Advisory Committee, Subcommittee on Economic Incentives and Regulatory Innovations, Washington, D.C. July 26, 1999

The fallacy of the market based model is its core assumption — the credible threat of enforcement. Ayres, Hennecke and Agency advocates of open market trading have insisted that EPA need not impose detailed technical requirements on trading programs, since the threat of enforcement will motivate industrial users of credits to demand the highest possible quality. Yet EPA's own studies and policies show that this assumption is untenable. EPA's severe enforcement limitations are no longer a secret:

Inspector General on Enforcement

In September of 1998 the OIG issued a scathing report, "Consolidated Report on OECA's [Office of Enforcement and Compliance Assurance] Oversight of Regional and State Air Enforcement Programs," produced by its Mid-Atlantic Audit Division, Philadelphia, Pennsylvania. The investigation reviewed six states' enforcement programs and EPA oversight of those programs:

- The OIG audit "disclosed fundamental weaknesses with state identification and reporting of significant violators of the Clean Air Act."
- "This occurred because states either did not want to report violators or the inspections were inadequate to detect them."
- "Without information about significant violators, EPA could neither assess the adequacy of the states' enforcement programs, nor take action when a state did not enforce the Clean Air Act."
- "State and even EPA regions disregarded Agency requirements, or were uncertain whether enforcement documents were guidance or policy."
- While the states found only 18 significant violators to report to EPA out of 3300 inspections, the OIG review of 430 of the 3300 files identified an additional 103 significant violators.

EPA's studies, policies and resources

Permits are not being issued correctly. While the OIG investigations looked at whether source permits, *as written*, were being enforced, the permits were not written correctly in the first place. According to publically available documents from the EPA and the National Park Service from the past two years, the permitting program is in no better shape than the enforcement programs and permits are not being written consistent with the requirements of the Clean Air Act. The Park Service reviewed 47 PSD permits and found that about half had a "fatal flaw," including faulty applicability determinations, control technology determinations, application of NSPS requirements and environmental impact analyses (NPS memo, December 4, 1998). OAQPS Director John Seitz called for a national review of implementation problems in an April 14, 1999 memorandum to the Regional Air directors. This evaluation has not been concluded. Note that neither of these studies involved trading programs, but examined "traditional" or "command and control" based programs.

Political interference. At least one Region's enforcement staff (Region 1 covering New England) has publically objected to the interference by political appointees in their enforcement efforts. That appointee has recently resigned.

Policy shift, cutting back on enforcement. EPA has also moved in the direction of de- emphasizing classic enforcement in favor of what it describes as "compliance

assistance." "Browner has massively dis-invested in enforcement," a "former high level EPA official" is quoted in a recent feature article. "The Clinton People have gutted environmental enforcement," according to federal prosecutor Gregory Sasse, based in Cleveland. As bad as the situation already is, EPA is planning to impose further drastic cuts on the staff of its Office of Enforcement and Compliance Assistance (OECA), reportedly by some 65 - 70 personnel.

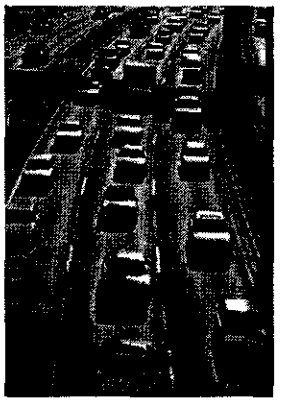
Waxman Refinery Study

On November 10 of this year Representative Henry Waxman released a Report prepared by the staff of the House Committee on Government Reform showing massive non-compliance by refineries with the basic requirements of the Clean Air Act. The study found that the sources were under-reporting the incidence of fugitive leaks by a factor of four and that "the failure to properly detect and repair leaking valves has a substantial adverse impact on air quality in the United States."

The study also notes "the vast majority of oil refineries are located near crude oil sources or in heavily industrialized areas," "refineries are the single largest stationary source of VOCs, the primary precursor of urban smog," "40% of the oil refineries – 66 out of 164 – are located in 'nonattainment ' areas that do not meet federal air quality standards...", and that these unreported emissions amounted to more than 80 million pounds of volatile organic compounds and over 15 million pounds of toxic pollutants.

Proposed Policies Heighten Uncertainty

Previous trading policies have required federal review and approval of quantification procedures, or protocols. As described earlier, this has ensured federal and citizen enforceability, national consistency, and safeguards against arbitrary relaxation of the Clean Air Act's pollution reduction requirements (see pp 13 - 14). These points have been made by many parties, both within (OECA, OAP, some Regional offices) and outside the Agency, noting that weakening the federal role in protocol development and approval would weaken enforceability.



The likelihood of required reductions actually occurring is reduced in other ways also, particularly due to a loss of "certainty" in the quantification techniques. This increased technical uncertainty renders enforcement of the originally required, or underlying, emissions reductions impossible. This follows from including within trading regimes source categories for which quantification is still an unknown or developing science. Credits from these newly eligible "generators," or providers of credits, would be used mostly by stationary sources to meet their own regulatory requirements.

Quantification protocols contain varying levels of uncertainty. It has been generally agreed among trading stakeholders for the past several years that quantification techniques for the source categories which expanded program eligibility (i.e. to include mobile, area, smaller stationary sources) are much less certain than the techniques limited to major stationary sources. Inherently, then, in a trade allowing a major stationary source to use (for instance) car scrappage reduction credits as an alternative to complying with stack emission limits, there is great potential for loss of certainty that the trade will achieved the desired emission reduction.

There are a number of possible approaches to addressing, accounting and compensating for this loss of certainty. One approach is to compare the "uncertainty error" for the generator and the user in a given trade, and, if the generator was more uncertain, then in order for the user to maintain compliance, the user would have to take steps to provide sufficient emission reduction credits to

compensate for the loss in certainty. The user would also have to adequately demonstrate that sufficient credits were provided to compensate for the greater uncertainty perceived by the generator. For its part, EPA's OAQPS staff put forth its own "statistical approaches" for measuring relative uncertainty relying on "one-tailed T-tests" and 60% confidence levels, effectively discounting the reductions.

While there was agreement in the 1995 - 1996 discussions that the uncertainty problem was real, there was not agreement on the significance of the problem, and there was substantial resistance to formalizing any "discount" procedures. The upshot was that resolution of the issue was deferred, and fogged by the vague hope that uncertainty effects would be compensated for by:

- the 10% "environmental benefit" in the OMTR proposal, and
- market forces compelling higher quality and certainty.

Both of these presumptions are quite suspect. The 10% benefit had been carried over from the 1994 EIP, where its basis was that the savings from EIPs should be shared with the environment (i.e. the breathing public) whereas in the 1999 EIP the benefit goes to the market as compensation for differences in uncertainty between generators and users. Moreover, the 1999 EIP blurs the 10% environmental benefit to an extent that it is no longer required, or even encouraged.

The 1999 proposal acknowledges the possibility of this uncertainty effect, but stops short of requiring its remedy. Regardless, even if the policy required compensation for differences in certainty, the requirement would be meaningless if the underlying quantification requirement itself was still exceedingly vague, as it is in the current proposal. **Significantly, the loss of certainty which accompanies intersector trading has not been addressed or resolved, nor can it be until the basic standards for quantification have been established at a sufficiently rigorous level.**

Taken together, internal and external observers have all reached the same conclusion that the current state of enforcement is quite questionable. Since the quantification questions surrounding intersector trading will make enforcement more difficult, the presumption that a "liability" driven quality control approach will have any integrity at all becomes unsupportable.

If the quality of credits is to be driven by the market, and the market is to be driven to any extent at all by a desire to avoid enforcement problems, this program is just plain not ready. EPA does not have the credibility, nor do the states, in terms of enforcement, to proceed with a quantification system that is driven by anything other than clear national guidance and requirements.

Attendees at a recent meeting of the Clean Air Act Advisory Committee reported that a senior EPA enforcement official stated plainly that *"neither EPA nor the states have the resources to actively enforce trading programs."* The frank and honest nature of this statement is at odds with the Agency assurances about how "the market" will be motivated in any way by fear of EPA enforcement activities.

It should be noted that at least some of the rollback in EPA enforcement efforts has been driven by pressure from industry and its sponsors in Congress. It is worse than ironic that the same sector pushing for a rollback of enforcement also hopes to be the beneficiary of a policy pretending to rely on the fear of enforcement to maintain the integrity of the program.

While it is not surprising to find industry taking these contradictory positions, for EPA to promote those positions defies common sense. It is clear that the necessary level of oversight is not available to move ahead with this program. It is equally clear that EPA upper management is well aware of this and has decided to move ahead with open market trading anyway. This is not so much "reinventing" environmental regulation as it is an abdication of environmental protection.

VII. *Caveat Emptor* for Public Health

Toxic Hot Spots

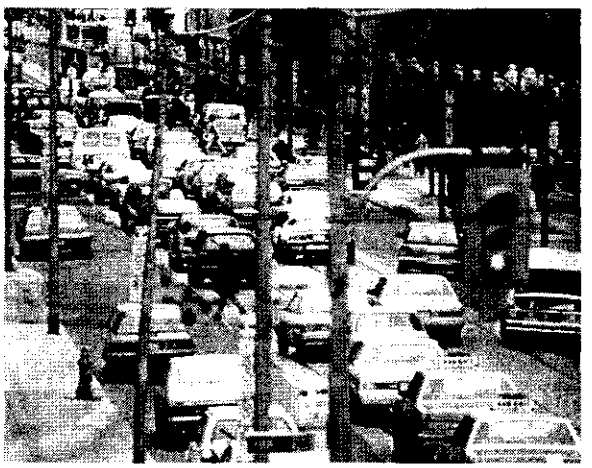
Under open market trading, cost reduction for industry would replace public health as the driving force behind compliance strategies since markets, not EPA, set the standard for quality. This can adversely affect public health in numerous ways. For instance, because the OMT plan allows "cross-pollutant" trading, a company may increase its emissions of a highly toxic chemical (such as benzene) if another company decreases its emissions of a relatively non-toxic chemical (such as nitrogen oxide or N). When several industrial facilities purchase pollution credits in one geographic area OMT would create toxic hot spots.

These "distributional" effects are not mitigated or managed in the 1999 EIP. One of the most popular "economic incentive" approaches of the past few years has been "accelerated retirement of vehicles," or car scrappage. When such credits are used as an alternative compliance approach the effect is to obtain the reductions from mobile sources spread over a wider area than if they were obtained, as under the original compliance requirement, at the stationary source. Under such a scheme, the promised local reductions would never be realized.

This has the effect, as described by environmental justice advocates, of concentrating emissions in the community around the stationary source. When the pollutants consist of volatile organic compounds (VOCs), many of which are toxic, the effect is to concentrate toxic emissions which have health effects which are much more dramatic and life threatening than those associated with ozone.

Injustice of OMTR

The loss in environmental and public health protection due to these unsound trading policies falls disproportionately on poor and minority communities in several ways. Many of these effects follow from the fact that the stationary source industrial base is disproportionately located in poor and minority communities, and that many and perhaps most trades will be for alternative compliance by stationary sources. The point of this comment is not to raise the issue of the disproportionate effects of siting decisions, but rather to look at the existing reality of the distribution of sources and then look at the effects of the proposed trading policies.



The loss of certainty has been described above, and the loss of certainty of compliance will occur mainly at stationary sources relying on emissions trading to demonstrate compliance. This effect will have a disproportionate impact on urban populations, i.e., populations which are disproportionately made up of poor and minorities. The loss of enforceability has also been described, and again, these losses will occur disproportionately at stationary sources in urban areas. Again, these problems will weigh disproportionately on low income and minority populations.

The interaction of these effects was displayed clearly in Los Angeles' South Coast area in a situation which

resulted in a formal complaint under Title VI of the 1964 Civil Rights Act that threatened to cut off federal funding to the South Coast District as well as cessation of use of the alternative compliance plan by most of the stationary sources. The complaint also focused on the attempts to dismiss the staff person who revealed the unsoundness of the problem.

The scrappage reductions, upon examination, were not only less "certain," they were in many instances nonexistent. Enforceability of the underlying requirement for compliance at the stationary sources only came about due to filing of civil complaints by the community. Even if the scrappage credits had been real and quantified accurately, the emission reductions in the immediate vicinity of the facility, a community disproportionately comprised of low income and minority people, would have been less than if the original compliance scheme was followed.

Magnifying the significance of these factors is the effect of deferred attainment of the public health based air quality standards. As has been described earlier, the Agency's fascination with cost cutting trading programs has resulted in indefinite delay of the development and submission of air pollution control plans, to achieve the public health based National Ambient Air Quality Standards (NAAQS). Submission of these plans for all federally designated "non- attainment areas" was required by 1994 under the Clean Air Act.

Non-attainment areas are, almost without exception, urban. Residents of these areas are disproportionately comprised of poor and minority populations, and thus they are bearing the primary burden for the lack of attainment plans.

A Flimsy Framework

The 1999 EIP proposal does, however, acknowledge the potential for environmental justice related effects and suggests a "framework" for addressing those effects. Regarding that acknowledgment:

- The framework addresses only distributional effects, but none of the other effects decribed here.
- The framework discussion is laden with "shoulds" rather than "requirements," and when the word "must" is used, it is followed by "consider." Consequently nothing is really required, and there is a question of whether the Agency really believes it can require anything. Lacking objective standards with regard to environmental justice, there is no credible threat of federal disapproval of programs for being deficient in this regard.
- As weak as the framework is, it also contains several presumptive exemptions from even those weak admonitions. These escape clauses are apparently triggered by a state making the case that its trading program generally results in reductions, and therefore distributional effects are "unlikely."
- There is a lack of cumulative analyses or required identification of overburdened communities.

No doubt the framework will be challenged more comprehensively by environmental justice advocacy groups, but the overall point is that shoddy trading programs will wreak their havoc disproportionately on the health of poor and minority communities, and the so-called framework will do little or nothing to ameliorate those effects.

VIII. Conclusion & Recommendations

The Agency has allowed its fixation on market based solutions to distract it from its Congressionally mandated primary responsibility under the Clean Air Act of protecting public health. It has developed a model of environmental protection that goes beyond the recommendations of many supporters of market based approaches, and rather than balancing market based and traditional approaches, the Agency has abandoned the traditional approaches in a wholesale manner. It has put forth policies which presume, and are utterly dependent upon, an enforcement role, which the Agency clearly cannot fulfill. In the absence of strong enforcement, the trading program will work to undermine the Clean Air Act's fundamental requirements. The approach makes an already problem-ridden enforcement program worse, and substantially increases the uncertainty that emission reductions will occur. Finally, the adverse effects of these policies, in terms of increased emissions and adverse health effects, will be felt disproportionately by low income and minority communities.

The following actions are necessary:

1. **The 1999 EIP proposal must be revisited, completed and re-proposed with options clearly defined, public comment and involvement obtained and taken into consideration.**

   As a potentially widespread tool for alternative compliance, and as a centerpiece of the supposed "Reinvention of environmental protection," nothing less will do. Proceeding with the policies without completing these necessary steps would conflict with not only the Administrative Procedures Act (APA), but also numerous provisions of the Clean Air Act and would throw into question the enforceability of any and all sources and permits relying to any extent on credits created under the policies.

2. **EPA must halt all actions based on the 1995 open market trading proposal.**

   There is no legal or policy basis. By all accounts EPA's one attempt at proposing an open market trading policy was never finalized. The August, 1995 proposal met with substantial opposition, not only from environmentalists, but from some state and local agencies. In an attempt to sidestep the problems with completing that action, the Agency tried to reconstruct it into a guidance document which likewise has never achieved sufficient support within the Agency to be issued.

   Nevertheless there remains a faction within the Agency, well represented at the upper levels of management, that has persisted in trying to approve individual state programs by engaging in rule-making based on the never finalized policies. In March of 1998, EPA's Assistant Administrator for Air and Radiation expressed this approach as follows:

   > "EPA continues actively to support state efforts to develop and implement such programs....we continue to believe [it] is most effective and helpful...for EPA to work with the States to develop open market programs tailored to their individual circumstances. In this process EPA and the states are using the August 1995 proposal as guidance..."

   Yet these policies were formally described by the Agency, the one time they were published, as a "proposed policy statement," and never subsequently finalized in any form. The same March, 1998 letter went on to say that in applying the 1995 proposal EPA was "taking into account the many useful comments we received in response to the proposal." Given the landslide of negative comments on the proposal, this statement is disingenuous.

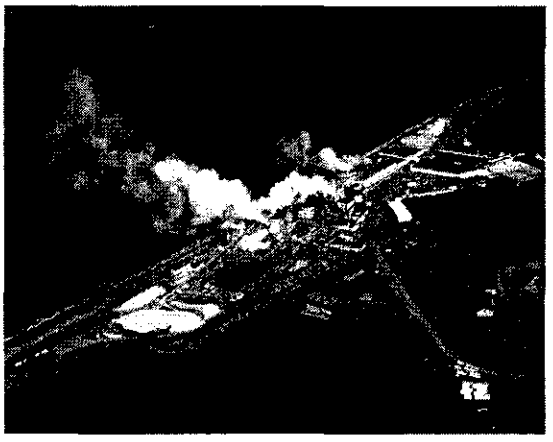
In the meantime pressure continues within the Agency to approve programs which have been submitted. Among those are the New Jersey and Michigan open market programs, and the Illinois (Chicago) Emission Reduction Market System (ERMS) which includes "features of both the 'open' and 'closed' market systems."

There is presently no legitimate policy or regulatory basis for proceeding with such actions. EPA should halt its attempts to force illegitimate actions through the administrative pipeline and recognize that even a seemingly "final" approval of a program would be subject to legal challenge, and expose sources relying on such programs to legal challenge, including citizen suits.

Attempts to proceed with approval of such programs should be halted. By trying to force such actions without a settled policy basis, the Agency risks engaging in a number of wildly divergent rule-making actions which are ultimately not only incomprehensible, but indefensible. Further, the current Agency approach is for each of the ten Regional offices to interpret the policies however they see fit, suggesting that the meaning of the federal Clean Air Act may be quite different from one Region to the next.

EPA enforcement should resume. During the several years since the Agency's first endorsement of open market trading, a number of states, inspired by the rhetoric and pressured by some industries, have begun implementing open market programs. Some states have for years been using alternative compliance schemes which are not allowed under current federal law or regulations — that is to say, they have been operating illegally. EPA, for its part, continues to exercise enforcement discretion by looking the other way, or in Henneke's words "basically say(ing) nice things about them."

Thus, federal oversight has been replaced by a wink and a nod. EPA should begin taking enforcement action against industries relying on illegal trading credits to meet compliance and



should suspend financial support for state programs which do not meet federal requirements.

This proposal does not meet industry needs. Most of the Agency's "reinvention" and "streamlining" initiatives have cited the need of industry for more "certainty" in the regulatory process. It is ironic that this particular reinvention-motivated program would result in actions which are so unsound and probably not sustainable. In addition, because the programs are legally vulnerable, they are likely to trigger time consuming litigation, thus magnifying the uncertainty. The absence of certainty will reduce industry incentives to invest in trading programs.

3. **The Agency should undertake a thorough review all of its reinvention policies to determine if the evolution of those policies has been similarly inappropriately influenced.**

The fallacious model for environmental protection described here has inevitably affected other aspects of the Agency's "reinvention" policies. Many of them also sacrifice "front end" Agency guidance and direction, deferring to back end audit and review procedures.

All of these approaches should be reviewed and examined to determine if in practice enforceability is maintained, if sufficient resources and deterrence will be provided, and whether the

public's right to participate and to take enforcement action has not been compromised.

The Open Question for Trading

The core issues for any emission trading program remain unresolved by the 1999 EIP proposal:

> What are the standards for creation and use of the emission reduction credits; how will their quality be assured, compliance with emission reduction requirements determined and enforceability protected?

Without resolution to these issues, EPA's proposed trading policies have no solid technical basis.

This seemingly arcane debate over quantification protocols reveals the sharp divide between two competing approaches for environmental protection.

- The first, or "traditional," approach proceeds from government establishment of clear technical and procedural standards for reducing pollution, and defines a time-line for achieving the health based air quality standards, in this case the National Ambient Air Quality Standards (NAAQS).
- The second, "market based," approach claims the same goal of achieving the NAAQS, but defers to commercial interests to establish and implement the technical and procedural criteria for pollution controls, on a state-by-state, locality-by-locality, basis.

The Clinton/Gore Administration has allowed the debate to be hijacked by commercial and industrial interests who have framed the issue as having to choose *between* two approaches as if they were mutually exclusive. The first is often characterized as "command and control," while the second is styled as the freedom-loving "invisible hand" of the marketplace which will achieve the same goals at half the price. The first is out-of-date, slow, inefficient "one size fits all;" the latter is called "performance based," "common sense," based on "economic incentives," "thinking outside the box."

This is an artificial choice, one based on a straw man characterization of traditional approaches to pollution control, even though it is these approaches which have in practice brought about almost all the pollution reductions which have been achieved over the past three decades. In reality the Clean Air Act, as enacted in 1970 and all subsequent amendments, is performance based. The Act confers broad discretion to the states and locals to determine how to meet the attainment requirements, and allows for the use of economic incentives to motivate pollution reductions.

Posing this false choice has a purpose, which is to remove the federal government from its fundamental role, as defined in the Clean Air Act, of overseeing and enforcing pollution control. The legitimate policy question ought to be how to *balance* traditional and market based approaches. This proposal, however, achieves no balance, but instead simply gives away the Clean Air Act by turning it over to "the market." This worship of the marketplace has resulted in EPA's setting aside the public health based requirements of the Act in favor of economic efficiency.

Left to clean up the predictable mess will be state and local agencies, environmental and community advocacy groups, and EPA's Regional offices, which, even if they strive for environmental integrity, will find themselves with no policy or legal legs on which to stand.

Left to suffer the quite real consequences will be the public, whose health will needlessly suffer and whose entitlement to clean air, as established by Congress in the Clean Air Act, will have been sold for a pittance.